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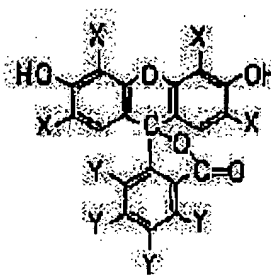
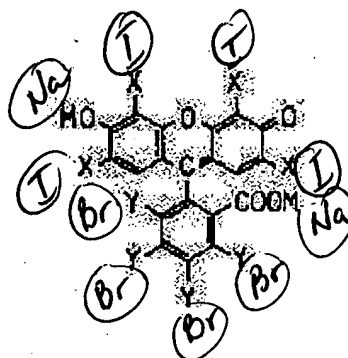
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(54) HAIR COLOR RINSE COMPOSITION

(57)Abstract:

PURPOSE: To obtain a hair color rinse compsn. having a superior dyeing effect, hardly irritating the skin, forming a natural color after use and also having a superior conditioning effect.

CONSTITUTION: This hair color rinse compsn. contains 0.01-2.0 pts.wt. one or more kinds of acid dyes, 0.01-0.5 pt.wt. one or more kinds of halogenated fluorescein dyes represented by formula I or II, (wherein X is H, Cl, Br or I, at least two of four X's are not H, Y is H, Cl or Br and M is H, Na or K), e.g. red No. 104 (phloxine B) and orange No. 201 (dibromofluorescein) and 1.0-20.0 pts.wt. disodium dimethiocone polyol sulfosuccinate having a mol.wt. of 10,000-30,000. This compsn. is preferably adjusted to pH 3.0-5.0 so as to produce a highly dyeing effect.



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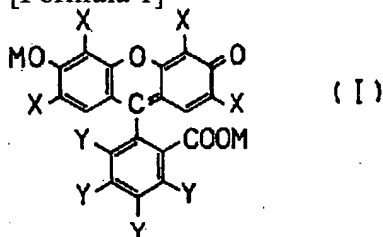
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 CLAIMS

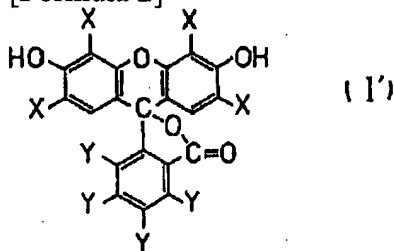
[Claim(s)]

[Claim 1] constituent AUW -- receiving -- one sort of acid dye of the 0.01 - 2.0 weight section or two sorts or more, and constituent AUW -- receiving -- the following general formula (I) of the 0.01 - 0.5 weight section -- or (I') the hair coloring rinse constituent characterized by containing disodium dimethicone copolyol SARUHOSAKUSHINETO of the molecular weight 10000-30000 of the 1.0 - 20.0 weight section to constituent AUW in one sort of halogenation slourescein dyes, or a two or more sort list.

[Formula 1]



[Formula 2]



(Y is the halogen atom chosen from a hydrogen atom, chlorine, or a bromine, you may differ, even if the above-mentioned formula (I) and (I') inside, and X are the halogen atoms chosen from a hydrogen atom or chlorine, a bromine, or iodine and are mutually the same, and at least two pieces are halogen atoms among four X, and M is [it is mutually the same and] the metal chosen from a hydrogen atom, Na, or K.)

[Claim 2] The halogenation slourescein dyes shown by the above-mentioned general formula (I) The (1) [phloxine B of red No. 104 Food and Drug & color number number [of Cosmetic]: -- D&C Red No.28, 2, 4 and 5, and 7-tetrabromo-9-(3, 4, 5, 6-tetra-chloro-o-carboxyphenyl)- disodium salt [of 6-hydroxy-3-iso xanthone]] --

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] About the hair coloring rinse constituent equipped also with the conditioning function to prevent the dry area of the hair after shampooing to the coloring function and ** of hair, if it is used for hair, homogeneity dyes in a short time, the tone of this invention of the dyed hair is natural, and it has the description which can make the condition of the hair after use good.

[0002]

[Description of the Prior Art] Although the product for hair dyeing can be classified into the eternal dyeing pharmaceutical preparation which uses a hair coloring rinse, a metallicity color, semipermanent dyeing pharmaceutical preparation, and oxidation dye as a base material, also in this, a hair coloring rinse is a product which performs two functions of dyeing and conditioning to coincidence, and after only a little between applies a hair coloring rinse to the wet hair, it is used after a shampoo by the method to wash out. Therefore, let simple nature of use be the advantage.

[0003] However, there is a fault that it must be difficult to get in the dyeing effectiveness the dyeing effectiveness is weak since the tar dye which is the acid dye which the condition of the coloring as a color in a hair coloring rinse constituent is uniform, does the natural dyeing effectiveness so, and does not damage hair is generally used, and it can be satisfied only with one use of dyeing, and hair must be made to have to contact for a long time, or it must be used [several times].

[0004] On the other hand, while hair is adsorbed easily, whenever [adsorption-to damaged hair] is large, there is no homogeneity of dyeing, dyeing nonuniformity arises, and basic dye is not desirable [in order to improve the dyeing effectiveness, basic dye can also be used, but] as a color for hair coloring rinse constituents from the fault of being unstable.

[0005]

[Problem(s) to be Solved by the Invention] The various attempts for improving the dyeing capacity of the hair coloring rinse constituent containing acid dye are made. for example, -- or it adjusts a constituent to the acescence using tartaric acid or a SARUFAMIN acid -- or the hair -- $C_{11}H_{23}COO-CH_2$, C, and $(CH_3)_2NH_3^+-OOC-CH_3$ etc. -- conditioning is carried out with synthetic detergent and the approach to which the amount of dyeing of acid dye is made to increase is proposed. Furthermore, although the attempt which be going to make the concentration of the color which use organic solvents, such as alcohol with which 2-phenoxyethanol, benzyl alcohol, and others be relate, and distribute or dissolve into a constituent increase, and be going to make it improve percentage exhaustion be also make, these solvents be the large matter of a skin stimulus, and many countries have restrict the use.

[0006] Therefore, it often in a short time dyed, the still more uniform dyeing effectiveness was done so, the natural tone of hair was obtained, luster was given to the hair, and offer of a hair coloring rinse constituent without a skin stimulus has been desired. The purpose of this invention is excellent in dyeing property, can present natural tone, and offers a hair coloring rinse constituent without a skin stimulus.

[0007]

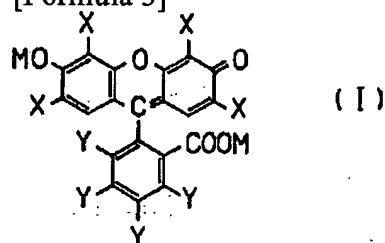
[Means for Solving the Problem and its Function] As a result of this invention persons' inquiring

wholeheartedly under the above situations, by mixing disodium dimethicone copolyol SARUHOSAKUSHINETO with the color of a halogenation fluorescein gestalt, it found out that the above-mentioned purpose could be attained to the acid-dye content hair coloring rinse constituent, and this invention was completed to it.

[0008] Namely, the hair coloring rinse constituent of this invention Constituent AUW is received like the publication to claim 1. One sort of acid dye of the 0.01 - 2.0 weight section, or two sorts or more, Or (I') receives one sort of halogenation fluorescein dyes, or a two or more sort list at constituent AUW. constituent AUW -- receiving -- the following general formula (I) of the 0.01 - 0.5 weight section -- It is the hair coloring rinse constituent characterized by containing disodium dimethicone copolyol SARUHOSAKUSHINETO of the molecular weight 10000-30000 of the 1.0 - 20.0 weight section.

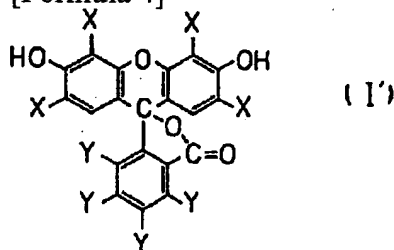
[0009]

[Formula 3]



[0010]

[Formula 4]



[0011] You may differ, even if it is the above-mentioned formula (I) and (I') halogen atom with which it set and X was chosen from a hydrogen atom or chlorine, a bromine, or iodine and is mutually the same, and at least two pieces are halogen atoms among four X. Moreover, Y is the halogen atom chosen from a hydrogen atom, chlorine, or a bromine, and is mutually the same. Furthermore, M is the metal chosen from a hydrogen atom, Na, or K.

[0012] Hereafter, the invention in this application is explained in more detail. In this invention, halogenation fluorescein dyes are used in order to make the dyeing property of the acid dye in a hair coloring rinse constituent increase, and they are an above-mentioned general formula (I) or (I') the tar system coloring matter shown.

[0013] As the above-mentioned general formula (I) or (I') halogenation fluorescein dyes shown To claim 2, like a publication The (1) [phloxine B and Food of red No. 104 Drug & color number number [of Cosmetic]: -- D&C Red No.28, 2, 4 and 5, and 7-tetrabromo-9-(3, 4, 5, 6-tetra-chloro-o-carboxyphenyl)- disodium salt [of 6-hydroxy-3-iso xanthone]] -- [rose bengal of red No. 105, 9-(3, 4, 5, 6-tetra-chloro-o-carboxyphenyl)-6-hydroxy - 2, 4, 5, disodium salt of 7-tetra-iodine-3-iso xanthone, Red No. 213 [rhodamine B, D&C Red No.19, and 9-o-carboxyphenyl - 3 of a 6-diethylamino-3-ethylamino-3-iso xanthone - ETOKURORIDO], Red No. 218 [tetra-chloro tetrabromofluorescein, D&C Red No.27, 2, 4 and 5, 7-tetrabromo-12, 13 and 14, 15-tetra-chloro -3, and 6-fluoran diol], Red No. 223 [tetrabromofluorescein, D&C RedNo.21, 2, 4 and 5, 7-tetrabromo-3, and 6-fluoran diol], (1) of red No. 230 -- [-- eosine Y S, D&C Red No.22, 2, 4 and 5, and 7-tetrabromo-9- disodium salt [of o-carboxyphenyl-6-hydroxy-3-iso xanthone]] -- (2) [eosine Y SK [of red No. 230], D&C Red No.23, 2, 4 and 5, and 7-tetrabromo-9- dipotassium salt [of o-carboxyphenyl-6-hydroxy-3-iso xanthone]] -- Red

No. 231 [the dipotassium salt of phloxine BK, 2, 4 and 5, 7-tetrabromo-9-(3, 4, 5, 6-tetra-chloro-o-carboxyphenyl)-6-hydroxy-2, 4 and 5, and 7-tetra-iodine-3-iso xanthone], an orange No. 201 [dibromo fluorescein, D&C Orange No. -- 5, 4, 5-dibromo -3, and 6-fluoran diol] -- Orange No. 205 [monosodium salt of Orange II, D&C Orange No.4, and 1-p-sulfophenylazo-2-naphthol], Orange No. 206 diiodofluorescein, D&C Orange No. 10, 4, 5-diiodo -3, 6-fluoran diol], or orange No. 207 [erythrosine yellow NA, D&C Orange No.11, 9-o-carboxyphenyl-6-hydroxy - Disodium salt [of 4 and 5-diiodo-3-iso xanthone]] etc. can be used.

[0014] The above-mentioned general formula (I) In or (I'), when blue is presented and a resorcinol ring and a phthalic-acid ring halogenate the more to coincidence the more it halogenates strongly although halogenation fluorescein dyes present red thru/or a blue hue after dyeing, the durability of the dyed hue becomes large.

[0015] Have been used also for the lipstick by the above-mentioned halogenation fluorescein dyes used by this invention, and skin stability is established, and when it is used for hair, mist beam stability is excellent.

[0016] In order for halogenation fluorescein dyes to make dyeing in a hair coloring rinse itself not only to have dyeing property, but increase greatly, the dyeing effectiveness which may be satisfied even if between short time amount contacts to hair the hair coloring rinse constituent which the halogenation fluorescein dyes by this invention contained is acquired. the amount of the halogenation fluorescein dyes used -- criteria [AUW / of a hair coloring rinse constituent] -- carrying out -- 0.001 - 1 weight section -- it is the 0.01 - 0.5 weight section preferably, and the above-mentioned color is independent -- or it is mixed and used.

[0017] The increment in dyeing property of acid dye is further improved by content of disodium dimethicone copolyol SARUHOSAKUSHINETO by the above-mentioned halogenation fluorescein-dyes content. In this invention, disodium dimethicone copolyol SARUHOSAKUSHINETO which can be used has that desirable whose molecular weight is 10000 to about 30000 in general.

[0018] Above-mentioned disodium dimethicone copolyol SARUHOSAKUSHINETO also has the operation which promotes the conditioning effectiveness of a hair coloring rinse constituent. That class of this compound is not restrictive, and it is possible to use without a limit of what is usually used for hair cosmetics. For example, MAKANETO (Mackanate) DC 30 of MAKINTAIA (McIntyre Co.Ltd.) is used.

[0019] According to this invention, disodium dimethicone copolyol SARUHOSAKUSHINETO is used in the amount of the 0.1 - 20.0 weight section to hair coloring rinse constituent AUW.

[0020] Since the hair coloring rinse constituent of the invention in this application can acquire the dyeing effectiveness which can be satisfied in a short time, its coloring hue is natural, the conditioning effectiveness can be attained after use, there are no side effects, such as hair damage, further and benzyl alcohol is not used by mixed use with the halogenation fluorescein dyes and disodium dimethicone copolyol SARUHOSAKUSHINETO like ****, it has the advantages, like there is no skin stimulus.

[0021] In the constituent of this invention, what is used as acid dye which is an indispensable component For example, the red No. (Amaranth, F.D&C Red No.2) 2, red No. (erythrosine, FD&C Red No.3) 3 and red No. (a new coccine --) 102 C. -- I.16255 18 and red No. (acid red --) 106 Acid Red C. -- I.45100 52 and yellow No. (Tartrazine --) 4 Acid Red F. Yellow D&C No.5, yellow No. (it SENSETTO-yellow-FCF(s)) 5 FD&C No.6 and green No. (a fast green FCF --) 3 Yellow FD&C No.3 and blue No. (brilliant blue FCF --) 1 Green FD&C No.1 and blue No. (indigo carmine --) 2 Blue F. D&C Blue No.2, red No. (fast acid MAGENTA) 227 D&C Red No.33 and green No. (ant ZANIN cyanine Green --) 201 F. -- D&C, Green No.5, and green No. (light green SF --) 205 Yellow, D&C Green No.4, blue No. (alpha ZURIN) 205 FG, D&C No.4, and orange No. (Orange II --) 205 Blue D&C Orange No.4 and red No. (Ponceaux SX --) 504 F. D&C Red They are No.4, purple No. (ARIZU roll purple, D&C [EXT and D&C], Violet No.2) 401, black No. (a naphthol blue black, D&C Black No.1) 401, etc.

[0022] In this invention, selection is [the class of acid dye] impossible for arbitration, it is chosen according to the hue of the product which it is finally going to obtain, and such selection is obvious for

this contractor. The amount of the acid dye contained in the constituent of this invention is the about 0.01 to 2.0 weight section.

[0023] The hair coloring rinse constituent of this invention may contain the component, for example, the surfactant, the thickener, the oil, the fatty alcohol, pH regulator, and water of others which are usually contained in a hair coloring rinse constituent in addition to halogenation fluoresein dyes, above-mentioned disodium dimethicone copolyol SARUHOSAKUSHINETO, and above-mentioned acid dye.

[0024] As a surfactant which can be used in this invention As an anionic surfactant, sodium lauryl sulfate, polyoxyethylene lauryl ethereal sulfate sodium, A lauryl ammonium sulfate, lauryl sulfuric-acid diethanolamide, polyoxyethylene lauryl ethereal sulfate diethanolamide, A lauryl sulfuric-acid triethanol amide, a polyoxyethylene lauryl ethereal sulfate triethanol amide, Disodium cocamide MIPA SARUHO succinate, a potassium KOKOHAIDORORAIZUDO animal protein, A TEA

KOKOHAIDORORAIZUDO animal protein, a sodium cocoyl glutamate, A TEA cocoyl glutamate, a sodium lauroyl glutamate, As a TEA RAURI roil glutamate, sodium lauroyl sarcosinate, sodium cocoyl sarcosinate, sodium lauroyl taurate, and an amphoteric surface active agent KOKOANFO carboxy glycinate, KOKOANFO carboxy propionate, KOKOANFO propionate, RAURO Anfo carboxy propionate, RAURO Anfo glycinate, RAURO Anfo propionate, a cocamide propyl betaine, A RAURAMIDO propyl betaine, KOKOBETAIN, a lauryl betaine, etc., independent [in chlorination alkyl dimethylbenzyl ammonium, chlorination alkyl trimethylammonium, chlorination dialkyl dimethylammonium, etc.] as both ion surface active agent -- or it can mix and use. The above-mentioned surfactant is usually used in the cosmetics field, and most is a name by the CTFA international makeup raw material lexicon (CTFA International CosmeticIngredient Dictionary) name ** method also in these.

[0025] There is the amount of the surfactant used within wide range limits with the color and the specific surfactant which are used, for example, it is the 0.1 to 10.0 section on the basis of constituent AUW.

[0026] As a thickener, hydroxypropylcellulose, hydroxypropyl-methylcellulose, hydroxyethyl methyl cellulose, poly quarter NIUMU (CTFA name), poly quarter NIUMU -10 (CTFA name), cull BOKISHIKUA (CTFA name), carboxymethyl hydronalium KISHIKUA, and PEG-120 methyl glucosyl dioleate etc. is used. The amount of the thickener used is wide range, and may be easily determined by not an important matter but this contractor in this invention.

[0027] As for oil, the germ oil of wheat, a HOOBA oil, sesame oil, safflower oil, soybean oil, corn oil, mineral oil, a ginseng radix oil, **** of a peach, etc. are used. The amount of the oil used may be easily determined by not an important matter but this contractor in this invention.

[0028] As for fatty alcohol, cetyl alcohol, stearyl alcohol, cetearyl alcohol, behenyl alcohol, capryl lactam rucksack alcohol, coconut alcohol, decyl alcohol, lauryl alcohol, myristyl alcohol, oleyl alcohol, tallow alcohol, coconut oil alcohol, tridecyl alcohol, etc. are used. The amount of the fatty alcohol used may be easily determined by not an important matter but this contractor in this invention.

[0029] It is desirable to adjust pH to 3.0-5.0 on the other hand, in order to acquire the effective dyeing effectiveness in the hair coloring rinse constituent of this invention. pH can be adjusted by the usable inorganic acid, the organic acid, or acid salt combining a constituent, and a lactic acid, formic acid, an acetic acid, a citric acid, a tartaric acid, phosphoric acid, boric acid, a glycolic acid, etc. are mentioned as an example of an acid.

[0030] The hair coloring rinse constituent by this invention can be applied to dyeing of ***** or canities, and is further applicable also to dyeing of silver hair or blond hair. Also in the case of black hair, it is usable, but there is an inclination for the hue of the colored color not to be expressed well.

[0031] Like, it applies to hair with the amount which can dye a hair coloring rinse constituent according to claim 1, and after [according to claim 3 / for a hue with naturally uniform hair to dye and acquire the conditioning effectiveness / sufficient] carrying out time amount contact, as the constituent of this invention is washed out, it can be used. In the case of semi long hair, it can apply to the hair which got wet after shampooing the amount of about 5-20ml once, and can more specifically be used by the approach of flushing after about 30 seconds thru/or 3 minutes. The dyeing effectiveness which can be

satisfied if it uses 5 to 6 times in succession by such approach is acquired.

[0032] In order to acquire a little more prompt dyeing effectiveness, spreading time amount can be extended to a slight degree. And if many use counts are increased in the case of black hair or valid time is extended, a certain amount of dyeing effectiveness can be acquired.

[0033]

[Example] This invention is clarified by explaining the concrete and un-limiting-example of the hair coloring rinse constituent by this invention below.

[0034] After adding hydroxyethyl cellulose to water and making it heat, stir and thicken it by preparation as shown in one to formula 5 table 1, what dissolved PARAOKISHI benzoacid methyl and NONOKISHI Norian -9 in ethanol was mixed. Subsequently, mixture was mixed with the color to homogeneity. Phosphoric acid adjusts pH to 3.0-5.0, and perfume is added.

[0035]

[Table 1]

成 分 名	処方1 (比較)	処方2 (比較)	処方3 (実施例)	処方4 (比較)	処方5 (比較)
ヒドロキシエチルセルロース	0.5	0.5	0.5	0.5	0.5
ベンジルアルコール	5.0	—	—	—	—
エタノール	—	5.0	5.0	5.0	5.0
ノノキシノール-9	1.0	1.0	1.0	1.0	1.0
パラオキシ安息香酸メチル	0.2	0.2	0.2	0.2	0.2
紫色401号	0.02	0.02	0.02	0.02	0.02
黒色401号	0.01	0.01	0.01	0.01	0.02
橙色205号	0.01	0.01	0.01	0.01	0.02
ジナトリウムジメチコンポリオール	—	10.0	10.0	—	—
サルホサクシネート (Mackamate DC30, McIntyre Co., Ltd. 製品)	—	—	—	—	—
赤色230号 (1)	—	—	0.02	0.02	—
香料	適量	適量	適量	適量	適量
燐酸	適量	適量	適量	適量	適量
精製水	適量	適量	適量	適量	適量

[0036] The tone which remains was compared, after applying to the wool cloth which degreased the constituent and washing out finely with a stream after 3 minutes, in order to examine dyeing property. When the degree of tone compared formulas 1 and 2, even if the degree of tone was similar, and the formula 3 which contains in coincidence the red No. 230 (1) which is halogenation fluoresein dyes, and disodium dimethicone copolyol SARUHOSAKUSHINETO presented the deepest tone and did not contain benzyl alcohol, it turned out that it dyes by deep tone. Formulas 4 and 5 are the comparisons of the same color concentration, and the dyeing property of formula 4 was excellent in Haruka.

[0037] In order to inspect the rinse effectiveness, after using the shampoo and washing the bundle of black hair with a die length [of 20cm], and a weight of 2g, the aforementioned test formula constituent

was applied and it washed out with the stream after 3 minutes. After drying with a xerasia vessel, a point and gloss of hair, and the ease of care and cleaning were evaluated, and the condition of **** and static electricity generating was violently evaluated for hair. It was confirmed that the rinse effectiveness of the formulas 2 and 3 which disodium dimethicone copolyol SARUHOSAKUSHINETO contained is most excellent in this trial.

[0038] The constituent was manufactured by the same approach as formulas 1-5 using the component shown in six to formula 9 table 2.

[0039]

[Table 2]

成 分 名	処方 6 (比較)	処方 7 (比較)	処方 8 (比較)	処方 9 (実施例)
ヒドロキシプロピルメチルセルロース	0.5	0.5	0.5	0.5
メタノール	5.0	5.0	5.0	5.0
ノノキシノールー 1 2	1.0	1.0	1.0	1.0
パラオキシ安息香酸メチル	0.2	0.2	0.2	0.2
紫色 4 0 1 号	0.02	0.02	0.02	0.02
黒色 4 0 1 号	0.02	0.01	0.02	0.01
橙色 2 0 5 号	0.02	0.01	0.02	0.01
ジナトリウムジメチコンコポリオール	—	—	10.0	10.0
サルホサクシネート (Mackanate DC30, McIntyre Co., Ltd. 製品)	—	0.02	—	0.02
赤色 1 0 4 号 (1)	—	0.02	—	0.02
香料	適量	適量	適量	適量
クエン酸	適量	適量	適量	適量
精製水	適量	適量	適量	適量

[0040] Dyeing property and the rinse effectiveness were examined by the same approach as formulas 1-5. About deep extent of tone, the dyeing tone of the formulas 7 and 9 containing the red No. 104 (1) which is halogenation fluorescein dyes presented deeply, and presented most deeply in the formula 9 which contains disodium dimethicone copolyol SARUHOSAKUSHINETO in coincidence.

[0041] It was shown that the rinse effectiveness is excellent in the formulas 8 and 9 which disodium dimethicone copolyol SARUHOSAKUSHINETO contained. [0042] as having been shown in ten to formula 15 table 3 -- formulas 1-5 -- setting -- ** -- the constituent of formulas 10-15 was manufactured by the same approach.

[0043]

[Table 3]

成 分 名	処方10 (比較)	処方11 (実施例)	処方12 (比較)	処方13 (比較)	処方14 (比較)	処方15 (実施例)
ヒドロキシプロピルセルロース	0.5	0.5	0.5	0.5	0.5	0.5
エタノール	5.0	5.0	5.0	5.0	5.0	5.0
ノノキシノール-12	1.0	1.0	1.0	1.0	1.0	1.0
パラオキシ安息香酸メチル	0.2	0.2	0.2	0.2	0.2	0.2
赤色401号	0.01	0.01	0.01	0.01	0.01	0.01
黒色401号	0.03	0.02	0.03	0.02	0.01	0.01
橙色205号	0.02	0.01	0.02	0.01	0.01	0.01
ジナトリウムジメチコンポリオール	—	10.0	10.0	—	—	10.0
サルホサクシネート(Mackamate DC30, McIntyre Co., Ltd. 製品)	—	0.01	—	0.01	0.02	0.02
赤色218号	—	0.01	—	0.01	0.01	0.01
赤色223号	—	適量	適量	適量	適量	適量
香料	適量	適量	適量	適量	適量	適量
クエン酸	適量	適量	適量	適量	適量	適量
精製水	適量	適量	適量	適量	適量	適量

[0044] formulas 1-5 -- setting -- ** -- dyeing property and the rinse effectiveness were examined by the same approach. When formulas 10-13 were compared, the dyeing tone of the formulas 11 and 13 containing the red No. 218 which is halogenation fluorescein dyeing, and red No. 223 presented deep extent of tone deeply, and the formula 11 to which disodium dimethicone copolyol SARUHOSAKUSHINETO is contained in coincidence presented the deepest tone.

[0045] Furthermore, when the quantity of the red No. 218 and red No. 223 which are halogenation fluoresein dyes was increased so that clearly from the result of formulas 14 and 15, dyeing property improved and the formula 15 containing disodium MECHIKONKOPORIORUSARUHO succinate was

further excellent in dyeing property. About the rinse effectiveness, it was shown that the formulas 11, 12, and 15 which disodium dimethicone copolyol SARUHOSAKUSHINETO contained are excellent.
[0046]

[Effect of the Invention] As mentioned above, since the hair coloring rinse constituent of this invention is that of specific ***** about halogenation fluoresein dyes and disodium dimethicone copolyol SARUHOSAKUSHINETO, and achieves good dyeing for a short time and demonstrates the uniform dyeing effectiveness while it contains existing acid dye, in order to be able to make a natural hue present and not to use benzyl alcohol further, it is also a constituent without a skin stimulus.

[Translation done.]

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TECHNICAL FIELD

[Industrial Application] About the hair coloring rinse constituent equipped also with the conditioning function to prevent the dry area of the hair after shampooing to the coloring function and ** of hair, if it is used for hair, homogeneity dyes in a short time, the tone of this invention of the dyed hair is natural, and it has the description which can make the condition of the hair after use good.

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EFFECT OF THE INVENTION

[Effect of the Invention] As mentioned above, since the hair coloring rinse constituent of this invention is that of specific ***** about halogenation fluoresein dyes and disodium dimethicone copolyol SARUHOSAKUSHINETO, and achieves good dyeing for a short time and demonstrates the uniform dyeing effectiveness while it contains existing acid dye, in order to be able to make a natural hue present and not to use benzyl alcohol further, it is also a constituent without a skin stimulus.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] The various attempts for improving the dyeing capacity of the hair coloring rinse constituent containing acid dye are made. for example, -- or it adjusts a constituent to the acescence using tartaric acid or a SARUFAMIN acid -- or the hair -- $C_{11}H_{23}COO-CH_2, C,$ and $(CH_3)_2NH_3^+-OOC-CH_3$ etc. -- conditioning is carried out with synthetic detergent and the approach to which the amount of dyeing of acid dye is made to increase is proposed. Furthermore, although the attempt which be going to make the concentration of the color which use organic solvents, such as alcohol with which 2-phenoxyethanol, benzyl alcohol, and others be relate, and distribute or dissolve into a constituent increase, and be going to make it improve percentage exhaustion be also make, these solvents be the large matter of a skin stimulus, and many countries have restrict the use. [0006] Therefore, it often in a short time dyed, the still more uniform dyeing effectiveness was done so, the natural tone of hair was obtained, luster was given to the hair, and offer of a hair coloring rinse constituent without a skin stimulus has been desired. The purpose of this invention is excellent in dyeing property, can present natural tone, and offers a hair coloring rinse constituent without a skin stimulus.

[Translation done.]

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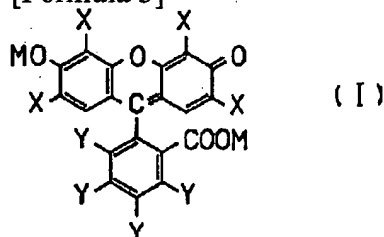
OPERATION

[Means for Solving the Problem and its Function] As a result of this invention persons' inquiring wholeheartedly under the above situations, by mixing disodium dimethicone copolyol SARUHOSAKUSHINETO with the color of a halogenation fluorescein gestalt, it found out that the above-mentioned purpose could be attained to the acid-dye content hair coloring rinse constituent, and this invention was completed to it.

[0008] Namely, the hair coloring rinse constituent of this invention Constituent AUW is received like the publication to claim 1. One sort of acid dye of the 0.01 - 2.0 weight section, or two sorts or more, Or (I') receives one sort of halogenation fluorescein dyes, or a two or more sort list at constituent AUW. constituent AUW -- receiving -- the following general formula (I) of the 0.01 - 0.5 weight section -- It is the hair coloring rinse constituent characterized by containing disodium dimethicone copolyol SARUHOSAKUSHINETO of the molecular weight 10000-30000 of the 1.0 - 20.0 weight section.

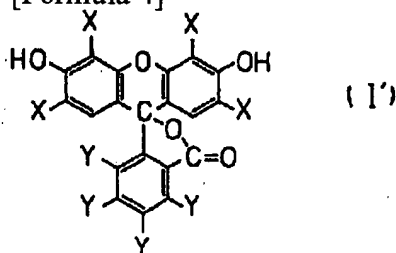
[0009]

[Formula 3]



[0010]

[Formula 4]



[0011] You may differ, even if it is the above-mentioned formula (I) and (I') halogen atom with which it set and X was chosen from a hydrogen atom or chlorine, a bromine, or iodine and is mutually the same, and at least two pieces are halogen atoms among four X. Moreover, Y is the halogen atom chosen from a hydrogen atom, chlorine, or a bromine, and is mutually the same. Furthermore, M is the metal chosen from a hydrogen atom, Na, or K.

[0012] Hereafter, the invention in this application is explained in more detail. In this invention, halogenation fluorescein dyes are used in order to make the dyeing property of the acid dye in a hair

coloring rinse constituent increase, and they are an above-mentioned general formula (I) or (I') the tar system coloring matter shown.

[0013] As the above-mentioned general formula (I) or (I') halogenation fluoresein dyes shown To claim 2, like a publication The (1) [phloxine B and Food of red No. 104 Drug & color number number [of Cosmetic]: -- D&C Red No.28, 2, 4 and 5, and 7-tetrabromo-9-(3, 4, 5, 6-tetra-chloro-o-carboxyphenyl)- disodium salt [of 6-hydroxy-3-iso xanthone]] -- [rose bengal of red No. 105, 9-(3, 4, 5, 6-tetra-chloro-o-carboxyphenyl)-6-hydroxy - 2, 4, 5, disodium salt of 7-tetra-iodine-3-iso xanthone, Red No. 213 [rhodamine B, D&C Red No.19, and 9-o-carboxyphenyl - 3 of a 6-diethylamino-3-ethylamino-3-iso xanthene - ETOKURORIDO], Red No. 218 [tetra-chloro tetrabromofluorescein, D&C Red No.27, 2, 4 and 5, 7-tetrabromo-12, 13 and 14, 15-tetra-chloro -3, and 6-fluoran diol], Red No. 223 [tetrabromofluorescein, D&C RedNo.21, 2, 4 and 5, 7-tetrabromo-3, and 6-fluoran diol], (1) of red No. 230 -- [-- eosine Y S, D&C Red No.22, 2, 4 and 5, and 7-tetrabromo-9- disodium salt [of o-carboxyphenyl-6-hydroxy-3-iso xanthone]] -- (2) [eosine Y SK [of red No. 230], D&C Red No.23, 2, 4 and 5, and 7-tetrabromo-9- dipotassium salt [of o-carboxyphenyl-6-hydroxy-3-iso xanthone]] -- Red No. 231 [the dipotassium salt of phloxine BK, 2, 4 and 5, 7-tetrabromo-9-(3, 4, 5, 6-tetra-chloro-o-carboxyphenyl)-6-hydroxy-2, 4 and 5, and 7-tetra-iodine-3-iso xanthone], an orange No. 201 [dibromo fluorescein, D&C Orange No. -- 5, 4, 5-dibromo -3, and 6-fluoran diol] -- Orange No. 205 [monosodium salt of Orange II, D&C Orange No.4, and 1-p-sulfophenylazo-2-naphthol], Orange No. 206 diiodofluorescein, D&C Orange No. 10, 4, 5-diiodo -3, 6-fluoran diol], or orange No. 207 [erythrosine yellow NA, D&C Orange No.11, 9-o-carboxyphenyl-6-hydroxy - Disodium salt [of 4 and 5-diiodo-3-iso xanthone]] etc. can be used.

[0014] The above-mentioned general formula (I) In or (I'), when blue is presented and a resorcinol ring and a phthalic-acid ring halogenate the more to coincidence the more it halogenates strongly although halogenation fluoresein dyes present red thru/or a blue hue after dyeing, the durability of the dyed hue becomes large.

[0015] Have been used also for the lipstick by the above-mentioned halogenation fluoresein dyes used by this invention, and skin stability is established, and when it is used for hair, mist beam stability is excellent.

[0016] In order for halogenation fluoresein dyes to make dyeing in a hair coloring rinse itself not only to have dyeing property, but increase greatly, the dyeing effectiveness which may be satisfied even if between short time amount contacts to hair the hair coloring rinse constituent which the halogenation fluoresein dyes by this invention contained is acquired. the amount of the halogenation fluoresein dyes used -- criteria [AUW / of a hair coloring rinse constituent] -- carrying out -- 0.001 - 1 weight section -- it is the 0.01 - 0.5 weight section preferably, and the above-mentioned color is independent -- or it is mixed and used.

[0017] The increment in dyeing property of acid dye is further improved by content of disodium dimethicone copolyol SARUHOSAKUSHINETO by the above-mentioned halogenation fluoresein-dyes content. In this invention, disodium dimethicone copolyol SARUHOSAKUSHINETO which can be used has that desirable whose molecular weight is 10000 to about 30000 in general.

[0018] Above-mentioned disodium dimethicone copolyol SARUHOSAKUSHINETO also has the operation which promotes the conditioning effectiveness of a hair coloring rinse constituent. That class of this compound is not restrictive, and it is possible to use without a limit of what is usually used for hair cosmetics. For example, MAKANETO (Mackanate) DC 30 of MAKINTAIA (McIntyre Co.Ltd.) is used.

[0019] According to this invention, disodium dimethicone copolyol SARUHOSAKUSHINETO is used in the amount of the 0.1 - 20.0 weight section to hair coloring rinse constituent AUW.

[0020] Since the hair coloring rinse constituent of the invention in this application can acquire the dyeing effectiveness which can be satisfied in a short time, its coloring hue is natural, the conditioning effectiveness can be attained after use, there are no side effects, such as hair damage, further and benzyl alcohol is not used by mixed use with the halogenation fluoresein dyes and disodium dimethicone copolyol SARUHOSAKUSHINETO like ****, it has the advantages, like there is no skin stimulus.

[0021] In the constituent of this invention, what is used as acid dye which is an indispensable component For example, the red No. (Amaranth, F.D&C Red No.2) 2, red No. (erythrosine, FD&C Red No.3) 3 and red No. (a new coccine --) 102 C. -- I.16255 18 and red No. (acid red --) 106 Acid Red C. -- I.45100 52 and yellow No. (Tartrazine --) 4 Acid Red F. Yellow D&C No.5, yellow No. (it SENSETTO-yellow-FCF(s)) 5 FD&C No.6 and green No. (a fast green FCF --) 3 Yellow FD&C No.3 and blue No. (brilliant blue FCF --) 1 Green FD&C No.1 and blue No. (indigo carmine --) 2 Blue F. D&C Blue No.2, red No. (fast acid MAGENTA) 227 D&C Red No.33 and green No. (ant ZANIN cyanine Green --) 201 F. -- D&C, Green No.5, and green No. (light green SF --) 205 Yellow, D&C Green No.4, blue No. (alpha ZURIN) 205 FG, D&C No.4, and orange No. (Orange II --) 205 Blue D&C Orange No.4 and red No. (Ponceaux SX --) 504 F. D&C Red They are No.4, purple No. (ARIZU roll purple, D&C [EXT and D&C], Violet No.2) 401, black No. (a naphthol blue black, D&C Black No.1) 401, etc.

[0022] In this invention, selection is [the class of acid dye] impossible for arbitration, it is chosen according to the hue of the product which it is finally going to obtain, and such selection is obvious for this contractor. The amount of the acid dye contained in the constituent of this invention is the about 0.01 to 2.0 weight section.

[0023] The hair coloring rinse constituent of this invention may contain the component, for example, the surfactant, the thickener, the oil, the fatty alcohol, pH regulator, and water of others which are usually contained in a hair coloring rinse constituent in addition to halogenation fluoresein dyes, above-mentioned disodium dimethicone copolyol SARUHOSAKUSHINETO, and above-mentioned acid dye.

[0024] As a surfactant which can be used in this invention As an anionic surfactant, sodium lauryl sulfate, polyoxyethylene lauryl ethereal sulfate sodium, A lauryl ammonium sulfate, lauryl sulfuric-acid diethanolamide, polyoxyethylene lauryl ethereal sulfate diethanolamide, A lauryl sulfuric-acid triethanol amide, a polyoxyethylene lauryl ethereal sulfate triethanol amide, Disodium cocamide MIPA SARUHO succinate, a potassium KOKOHAIDORORAIZUDO animal protein, A TEA KOKOHAIDORORAIZUDO animal protein, a sodium cocoyl glutamate, A TEA cocoyl glutamate, a sodium lauroyl glutamate, As a TEA RAURI roil glutamate, sodium lauroyl sarcosinate, sodium cocoyl sarcosinate, sodium lauroyl taurate, and an amphoteric surface active agent KOKOANFO carboxy glycinate, KOKOANFO carboxy propionate, KOKOANFO propionate, RAURO Anfo carboxy propionate, RAURO Anfo glycinate, RAURO Anfo propionate, a cocamide propyl betaine, A RAURAMIDO propyl betaine, KOKOBETAIN, a lauryl betaine, etc., independent [in chlorination alkyl dimethylbenzyl ammonium, chlorination alkyl trimethylammonium, chlorination dialkyl dimethylammonium, etc.] as both ion surface active agent -- or it can mix and use. The above-mentioned surfactant is usually used in the cosmetics field, and most is a name by the CTFA international makeup raw material lexicon (CTFA International CosmeticIngredient Dictionary) name ** method also in these.

[0025] There is the amount of the surfactant used within wide range limits with the color and the specific surfactant which are used, for example, it is the 0.1 to 10.0 section on the basis of constituent AUW.

[0026] As a thickener, hydroxypropylcellulose, hydroxypropyl-methylcellulose, hydroxyethyl methyl cellulose, poly quarter NIUMU (CTFA name), poly quarter NIUMU -10 (CTFA name), cull BOKISHIKUA (CTFA name), carboxymethyl hydronalium KISHIKUA, and PEG-120 methyl glucosyl dioleate etc. is used. The amount of the thickener used is wide range, and may be easily determined by not an important matter but this contractor in this invention.

[0027] As for oil, the germ oil of wheat, a HOABA oil, sesame oil, safflower oil, soybean oil, corn oil, mineral oil, a ginseng radix oil, **** of a peach, etc. are used. The amount of the oil used may be easily determined by not an important matter but this contractor in this invention.

[0028]